

### by Project Category and Type

<b>Category:</b>	Capital
<b>Type:</b>	Sanitary Sewer

City of Sunnyvale  
Ten Year Project Costs  
by Project Category and Type

Project Number	Project Name	Prior Years Actual	Revised Budget 2003-04	Plan 2004-05	Plan 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Ten Year Plan Total	Project Grand Total
Total		1,605,355	1,211,875	960,667	319,123	39,090	39,872	40,669	445,583	42,312	43,138	44,000	44,880	2,019,334	4,836,564

## Project Information Sheet

### Project: 801100 WPCP Air Conditioning Project

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1995-96	Phase:	Planning	Project Manager:	John Addeo
Planned Completion Year:	2003-04	% Complete:	0	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455 Utilities		Sub-Fund:	300 Wastewater Management	

### Statement of Need

During the sizing evaluation of the existing unit, issues arose requiring the need to evaluate the use of 5 individual A/C units versus 1 central unit to handle the entire building. Consultants have been contacted and this project will fund the evaluation and specifications. Following the evaluation, funding will need to be identified for purchase of the Air Conditioning Unit(s).

### Service Level

Reliability of equipment has direct influence on service levels and costs relating to repairs and downtime.

### Issues

none

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	0	27,273	0	0	0	0	0	0	0	0	0	0	0	27,273
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 805201 Sewer Development Costs (City Share)

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Dick Bell
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3B	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	385 Capital Projects		Sub-Fund:	200 Sewer Fund Assets	

### Statement of Need

The purpose of this project is to pay the City's pro-rata share for oversizing sanitary sewers constructed by private developers.

### Service Level

no service level effect

### Issues

Effective FY 2004/05, this project has been moved to the Utilities -Wastewater Management Fund (805202).

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	29,408	37,740	0	0	0	0	0	0	0	0	0	0	0	67,148
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	37,740											0	37,740
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 805202    Sewer Development Costs (City Share)

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Dick Bell
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3B	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455    Utilities		Sub-Fund:	300    Wastewater Management	

### Statement of Need

The purpose of this project is to pay the City's pro-rata share for oversizing sanitary sewers constructed by private developers.

### Service Level

no service level effect

### Issues

See project 805200 and 805201 for prior expenditure history.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	38,117	38,323	39,090	39,872	40,669	41,483	42,312	43,138	44,000	44,880	411,884	411,884
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
Utilities Fund - Sewer			38,117	38,323	39,090	39,872	40,669	41,483	42,312	43,138	44,000	44,880		
<b>Total</b>	0	0											411,884	411,884
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

**Project: 811300 Kifer Lift Station**

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1992-93	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	10	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	Murphy East	
Fund:	455 Utilities		Sub-Fund:	300 Wastewater Management	

### Statement of Need

This project will replace equipment at this existing pump station that is prone to flooding and has outlived its useful life.

### Service Level

no service level effect

### Issues

Project on hold pending resolution of a sewer capacity deal with City of San Jose.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	131,045	286,288	0	0	0	0	0	0	0	0	0	0	0	417,333
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 811700    Oxidation Pond Levee Improvements

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1993-94	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455    Utilities		Sub-Fund:	300    Wastewater Management	

### Statement of Need

This project was developed to complete modifications necessary to maintain the functionality of our secondary process, the Biological Ponds. Should we lose this ability we would not be able to process wastewater for the City of Sunnyvale. The needs were based on a 1987 Pond study completed by EOA Inc. and have incorporated a staged implementation of several improvements. Completed projects include the raising of the outer levee on Pond #1 and raising the West Main dyke on Pond #2.

The remaining funds will be used to complete plans and specifications to raise the inner levee and perform the evaluation of the transfer tubes. The two oxidation ponds are bounded by levees with inflow and outflow transfer tubes. The levees are founded on soft bay mud soils and must periodically be raised to maintain proper flood control elevations and provide safe roads for inspection or process monitoring. Also, the aging metal transfer tubes must be relined to maintain structural integrity and flow rates demanded by the treatment process. This evaluation will define the need to repair or replace the 18 transfer tubes along with the hydraulic effects of the proposed changes. The work includes the necessary surveying and mapping, geotechnical and civil engineering, permit assistance, engineering support along with cost estimates for raising the levee 1-2 feet and rehabilitating the transfer tubes.

### Service Level

Maintain compliance with discharge regulations during future operation of the treatment plant.

### Issues

Without proper maintenance we could lose the ability to treat our wastewater.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	602,353	133,388	500,000	0	0	0	0	0	0	0	0	0	500,000	1,235,741
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
Utilities Fund - Sewer			500,000	0	0	0	0	0	0	0	0	0		
<b>Total</b>	0	0											500,000	500,000
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 812750    WPCP Energy Improvements

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1987-88	Phase:	Construction	Project Manager:	Hira Raina
Planned Completion Year:	2004-05	% Complete:	50	Project Coordinator:	John Addeo
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455    Utilities		Sub-Fund:	300    Wastewater Management	

### Statement of Need

This project establishes Phase VII in this series of Energy Improvements. Improvements will be influenced by results and demands of the impact of both the Water Reuse Project and the Sludge Management Project. It will provide additional algae float thickening equipment so that 100% of the recoverable algae can be digested for the production of methane gas, and eliminate the recycled solids loading on the Pond System. Preliminary engineering design work has identified what is needed to complete this project.

### Service Level

no service level effect

### Issues

none

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	218,550	70,348	0	0	0	0	0	0	0	0	0	0	0	288,898
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Project Information Sheet

### Project: 820860    Air Floatation Tank Gate Actuators

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Design	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	35	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	385    Capital Projects		Sub-Fund:	200    Sewer Fund Assets	

### Statement of Need

This project is needed as a cost avoidance and reliability feature for recycled water production. Production will require air floatation to be taken out and put into service several times a day. Reliable and timely operation of aft gates will optimize water production actuators for five gates needed. Construction is planned to be completed in FY 2002/03. Bids are due in December 2002.

### Service Level

no service level effect

### Issues

none

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	56,461	15,075	0	0	0	0	0	0	0	0	0	0	0	71,536
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	16,536	0											0	16,536
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 821320    Back-up Power for Sewage Lift Stations

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	1999-00	Phase:	Construction	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	85	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3F	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	385 Capital Projects		Sub-Fund:	200 Sewer Fund Assets	

### Statement of Need

The existing Lawrence and Arques sewage lift stations cannot operate during power failures. Extended power outages can result in sanitary sewage spills from the sewer system. Such spills are violations of the Water Pollution Control Plant (WPCP) National Pollution Discharge Elimination System (NPDES) permit. Installation of a back-up power supply for use at each station will reduce the potential for discharge permit violations and potential fines by the Regional Water Quality Control Board.

### Service Level

no service level effect

### Issues

The contractor is working on obtaining Air Quality Board permit.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	179,916	11,085	0	0	0	0	0	0	0	0	0	0	0	191,001
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 821900    Conway Road Improvement Project

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2000-01	Phase:	Construction	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	60	Project Coordinator:	none
Origin:	Staff			Interdependencies:	none
Element:	2 Community Development		Goal:	2.3B	
Sub-Element:	2.3 Housing and Community Revitalization		Neighborhood:	De Anza	
Fund:	385    Capital Projects		Sub-Fund:	100    General Fund Assets	

### Statement of Need

The Conway Road Improvement project will result in the construction of private roadway improvements with a public access easement, the undergrounding of existing overhead utilities, and the construction of public water, sewer, and storm drainage facilities affecting twelve private lots.

This project will complete roadway and utility improvements in an unimproved area off of Hollenback Avenue near Fremont Avenue. The work is being funded with the formation of an assessment district to be paid for by the property owners. The City has agreed to pay for a new sewer main to allow for the elimination of septic tanks in the area. The project is under construction and near completion.

### Service Level

The improvements will provide safer vehicular access, increased water flows for fire suppression purposes, and standard sanitary sewer services.

### Issues

Due to inadequate access and water availability, the Community Development Department will not issue building permits except for simple maintenance or repairs to the owners of the twelve private lots.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	349,987	97,613	0	0	0	0	0	0	0	0	0	0	0	447,600
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 822620    Auto Sodium Bisulfite System for Recycled Water Delivery

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2001-02	Phase:	Design	Project Manager:	Hira Raina
Planned Completion Year:	2003-04	% Complete:	15	Project Coordinator:	John Addeo
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3C	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	385    Capital Projects		Sub-Fund:	200    Sewer Fund Assets	

### Statement of Need

Dechlorination of delivered water is needed. This project was an alternate bid item when the Tertiary Improvement project was constructed but funds were not available at that time. The project is needed to provide customer reliability of the product delivered. Project design began in FY 2002-03. 100% design complete.

### Service Level

Service Delivery Plan 34206 - By-Product Reuse, requires that our focus is on: "Producing recycled water that meets the quality and quantity demands of the water supply and distribution system." Unless we dechlorinate the delivered product our customers would be adversely impacted.

### Issues

Production of recycled water requires that a high (over 5ppm) chlorine residual is maintained. Delivery of this high chlorine level is harmful to all our irrigation customers, so we manually feed sodium bisulfate to dechlorinate delivered water. This current manual method is costly and unreliable, as it is impossible to manually feed efficiently with the great variation of demand. Installation of an automation feed system is required.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	37,635	159,865	0	0	0	0	0	0	0	0	0	0	0	197,500
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824300 Replacement of Digester Lids

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2002-03	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	0	Project Coordinator:	Dan Hammons
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.3c	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455 Utilities		Sub-Fund:	300 Wastewater Management	

### Statement of Need

This project would provide funds to replace four digester covers built in 1961. The first three are the same size and the fourth lid is larger. We are now experiencing leaks into the inside of these covers. While we can make some patches, they are now past their expected life.

### Service Level

No service level effect unless failure occurred. This is infrastructure maintenance.

### Issues

Failure of these covers would result in the release of gas into the atmosphere and fines would be incurred.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	0	318,200	422,550	280,800	0	0	0	404,100	0	0	0	0	1,107,450	1,425,650
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
Utilities Fund - Sewer			422,550	280,800	0	0	0	404,100	0	0	0	0		
<b>Total</b>	0	0											1,107,450	1,107,450
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824320 Toeberm for Biosolids Monofill

Category:	Capital	Type:	Sanitary Sewer	Department:	Public Works
Origination Year:	2003-04	Phase:	Design	Project Manager:	Mark Bowers
Planned Completion Year:	2003-04	% Complete:	10	Project Coordinator:	Gail Bentley
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management		Goal:	3.2H	
Sub-Element:	3.3 Sanitary Sewer System		Neighborhood:	City Wide	
Fund:	455 Utilities		Sub-Fund:	200 Solid Waste Management	

### Statement of Need

The Toe Berm has been identified as a necessary precursor to the safe use of the Biosolids Monofill area. Disposal of high moisture content wastes is anticipated to occur in the Monofill area. Due to the topography of the area, and the proximity of Caribbean Drive, it has been deemed necessary to construct a berm at the southern end of the Monofill to ensure waste stability. This will allow the safe use of the Biosolids Monofill.

### Service Level

None

### Issues

There is concern that use of the Monofill without the construction of the toe berm could, in the event of a sufficient seismic event, result in rapid movement of the materials disposed of in the Monofill into Caribbean Drive.

### Project Financial Summary

Financial Data	Prior Years Actual	Revised Budget 2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	10 Year Budget	Grand Total
<b>Project Costs</b>	0	55,000	0	0	0	0	0	0	0	0	0	0	0	55,000
<b>Revenues</b>														
<b>Total</b>	0	0											0	0
<b>Transfers-In</b>														
<b>Total</b>	0	0											0	0
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0